This submission is in support of the Petition RM-10352. The writer is an Extra Class Radio Amateur and holder of Station License W2ODC.Professionally, I am a retired research and development telecommunications engineer.

The 160 meter amateur band is an anomaly in that there is no regulatory separation of wideband (radio telephone and imagery) and narrow band emissions. Narrow band emissions on the amateur bands are typically International Morse Code (CW) and teleprinter. Much of the newer experimental transmissions are digital, with various modulation methods and channel encoding. Typical is the PSK-31 system. Since the narrow band transmissions are generally much more efficient than wideband techniques, on the average they operate with lower power to achieve desired communications. Because they are narrow band, many more stations can be accommodated within the allotted spectrum. These two factors cause difficulty if wideband stations are present near the narrow band transmissions working near the edge of their communication capabilities.

Simply stated, narrow band and wideband transmissions in the same spectral space cause problems even with the best of intentions on the part of the radio operators. On the amateur bands other than 160 meters the force of regulation has minimized the problems. Experience has shown that band plans have been successful in the amateur radio service with common bandwidth emissions, such as the complex channel plans for the various VHF and UHF bands. Without the force of regulatory separation of the wideband and narrow band emissions on 160 meters there are difficulties.

The current mix of wideband and narrow band emissions with international transmissions show the technical problems at 40 meters, but this is an international problem and not a part of the subject petition.